

are needed, they must be established by the United States Army Surgeon General or the NIH on an individual basis.

§ 627.20 Operations with radioactive material.

Operations that combine etiologic agents with radioactive material present unique problems. When this is the case, the following apply:

(a) *Radiation program.* A radiation program meeting the requirements of AR 385-11 and NRC licensing that allows the particular isotope and its use are required. The requirements for acquisition, handling procedures, labeling, storage, training, monitoring, and disposal will be described in an organization policy document.

(b) *Procedure approval.* In addition to the required approvals for work with etiologic agents, the RPO will approve all SOPs involving the use of radioactive materials. Laboratory operators must be fully trained, with annual training updates as required by the existing license.

(c) *Special situations.* (1) The laboratory waste must be segregated as radioactive waste and disposed of as such after it has been decontaminated. Do not mix nonradioactive waste with radioactive waste as the disposal of radioactive waste is much more complex and expensive. When RCRA-listed chemicals are mixed with radioactive waste, it becomes "mixed waste" for which there is currently no means of disposal.

(2) Activities conducted with radioisotopes should be confined to the smallest number of areas or rooms consistent with requirements.

(3) Decontamination methods specific to etiologic agents will not always remove radioactivity. Other methods, such as specialized detergents and solvents designed for this use, should be employed to remove residual radioactivity.

Subpart D—Personal Protective Equipment

§ 627.21 Introduction.

Personal protective equipment (PPE) includes clothing and equipment used to protect the laboratory worker from

contact with infectious, toxic, and corrosive agents, as well as excessive heat, fire, and other physical hazards. The appropriate PPE for any activity depends upon the proposed operations and the potential hazards associated with them. While PPE is an important item of personal protection, it serves as only a secondary line of protection against hazards in the workplace. Engineering controls (subpart H), combined with common sense, good laboratory techniques, and adherence to SOPs, are the primary barriers to exposure. There are some situations, however, in which it is either impractical or impossible to rely exclusively on engineering controls. In these cases, PPE may form the primary barrier between personnel and the hazardous or infectious materials.

§ 627.22 Minimum laboratory attire for use of etiologic agents.

Individuals required to wear PPE will be trained in its proper use. The PPE listed below is the minimum required when etiologic agents are handled at any biosafety level. Research with etiologic agents usually involves hazards other than those presented by the agents themselves. When PPE is selected, the hazards presented by these other factors must be considered regardless of the biosafety level used. For example, toxic chemicals are commonly used in research involving etiologic agents. The processes may expose personnel to physical hazards, such as heat or animal bites, and the decontamination process may involve the handling of toxic or corrosive materials. When the PPE required to mitigate these hazards exceeds that of the minimum requirements, the necessary PPE will be selected considering all the hazards. Information regarding the additional appropriate PPE worn to protect against these hazards will be available from one of the following sources: MSDS, SOP for the operation, or the safety officer. Deviations from the standards stated in approved SOPs must be approved by the safety officer. All laboratory coats worn to protect the individual should be left in the laboratory when that individual leaves. In each case, the minimum attire will be—